California. GARDEN

MARCH-APRIL 2000

Volume 91 No. 2

\$1.50



HORTICULTURAL CALENDAR

Due to a mix-up, we were given the dates of Feb. 26-27 for the Ohara School of Ikebana Show. It will be Mar. 4-5. Sorry you may not receive this information in time. MAR. 4

★SAN DIEGO FLORAL ASSOCIATION

Library open from 10AM-3PM Mon.-Fri., and also the first and third Saturdays. Members of SDFA can check out books. (Membership is \$10 a year, includes magazine.) In Balboa Park, Casa del Prado, Room 105. 619/232-5762.

MAR. 4-5

OHARA SCHOOL OF IKEBANA Annual Flower Show and Bazaar, Sat. and Sun. 11AM-4:30PM. Demonstrations both days at 1PM, 2PM, and 3PM. Casa del Prado, Room 101. Free.

MAR. 6

PALOMAR DISTRICT DESIGN FORUM

Demonstrations by Dorothy Driscoll, a Garden Club and Floral Arrangers Guild member. Her designs are clean and crisp. R.B. Community Presbyterian Church. 17010 Pomerado Road, Rancho Bernardo. 12:30-3PM. \$35 Series. \$8 Door. 760/749-9608.

MAR. 11

LAKE HODGES NATIVE PLANT CLUB California Nativescapes Botanical Garden Guided Tour at San Diego Wild Animal Park. 10AM. Free with admission. 858/487-2629.

MAR. 18

★SAN DIEGO FLORAL ASSOCIATION LIBRARY will be open. See Mar. 4 for details.

MAR. 18

MIRA COSTA HORTICULTURE CLUB OF OCEANSIDE Arbor Day celebration at Mira Costa College Horticulture Department, with Karen McCloskey. North of One Barnard Drive, Oceanside.

MAR. 18-19

IKEBANA INTERNATIONAL-CHAPTER 119 32nd Annual Spring Show: "New Age of

Ikebana." 11AM-4:30PM. Demonstrations both days at 1PM, 2PM, and 3PM. Casa del Prado, Room 101. 619/583-8979.

MAR. 18

QUAIL BOTANICAL GARDENS

Easter Basket Workshop. 9:30_{AM}-3:30_{PM}. \$35 members, \$45 non-members. Early registration encouraged. 760/436-3036 for more information. 230 Quail Gardens Drive, Encinitas.

MAR. 19

JAPANESE ARTS AND CRAFTS SHOW

11AM-4:30PM. Casa del Prado, Room 102. Demonstrations include silk painting, Sumo wrestling, brush painting, kimono dressing, and koto concert. Free.

MAR. 19

SIERRA MADRE CHAMBER OF

COMMERCE Wistaria Festival and Art Faire. Downtown Sierra Madre. 9AM-4PM. Free, but advance tickets required. Write: Wistaria Tickets, Sierra Madre Chamber of Commerce, 49 S. Baldwin Ave., Suite K, Sierra Madre, CA 91024. State number of tickets and preferred hour. Not handicapped compatible. 626/306-1150.

MAR. 24-26

SAN DIEGO COUNTY ORCHID SOCIETY 54th Orchid Show and Sale. Fri. 6-10PM, Sat. 9AM-6PM, Sun. 9AM-4PM. Scottish Rite Center, 1895 Camino del Rio South. 858/720-1790.

MAR. 25

SAN DIEGO HOME GARDENING SEMINAR

University City High School, 6949 Genesee Avenue. 8AM-3:45PM. 858/694-2860. Registration deadline Mar. 15. \$28 for 4 classes, \$8 each on day if any still open. (Master Gardeners)

MAR. 25-26

THE HUNTINGTON 45th Annual California Bonsai Society Show. 10:30AM-4:30PM. 1151 Oxford Rd., San Marino. 626/405-2281. General admission \$8.50

MAR. 28

★SAN DIEGO FLORAL ASSOCIATION

ADAMSON HOUSE TOUR Docent-led tour of 1929 Moorish Spanish Colonial Revival-style home in Santa Monica. \$29 Members, \$32 for Nonmembers. Call Ann Waters at 858/277-5004

MAR. 31-APR. 2

SANTA BARBARA ORCHID SHOW

55th Annual International Orchid Show. Earl Warren Showgrounds Exhibit Building, Highway 101 and Las Positas Rd. Fri. 10AM-5PM, Sat. 9AM-5PM, Sun. 10AM-5PM. General Admission \$8, Seniors \$6. 805/687-0766.

APR. 1

★SAN DIEGO FLORAL ASSOCIATION
LIBRARY will be open. See Mar. 4 for details.

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FLOWER SHOWS: Show chairman contact California Garden, 619/232-5762 if you want the magazine sold at your show.

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APR. 3

PALOMAR DISTRICT DESIGN FORUM

Lorna Bonham and Priscilla Strong: "Double, Double, and More Trouble." R.B. Community Presbyterian Church, 17010 Pomerado Rd. Rancho Bernardo. 12:30-3PM. \$8 at Door, \$35 for series. 760/749-9608.

APR. 8

LAKE HODGES NATIVE PLANT CLUB

California Nativescapes Botanical Garden Guided Tour at San Diego Wild Animal Park. 10AM. Free with admission. 858/487-2629.

APR. 8-9

CORONADO FLORAL ASSOCIATION 75TH FLOWER SHOW "Diamond Jubilee." Sixth Street and Orange Avenue. Amateur entries

welcomed in all sections. Sat. 1-5:30PM, Sun. 10AM-4PM, Call 1-800-622-8300 or 437-8788.

APR. 14

LAKE HODGES NATIVE PLANT CLUB

12th Annual Spring Gardens on Tour in Poway and Rancho Bernardo. 10AM-3PM. \$10 tax deductible donation. 760/741-0829.

APR. 15

★SAN DIEGO FLORAL ASSOCIATION LIBRARY will be open. See Mar. 4 for details.

APR. 15

AMERICAN ASSOCIATION OF

UNIVERSITY WOMEN 6th Annual Country Garden Tour of Fallbrook 12:30PM to 4:30PM. The self-guided tour of 5 distinctive gardens is a fundraiser for local scholarships and educational programs. \$15 ticket includes refreshments at one of the homes. For info and tickets call 760/731-0706 or 723-9686.

APR. 15-16

THE HUNTINGTON Rose Festival. 10:30AM to 4:30PM. General Admission. Rose-related books and gift items available. Rose Garden Curator Clair Martin will sign copies of his latest book. 626/405-2281.

APR. 26

★SAN DIEGO FLORAL ASSOCIATION TOUR OF MILDRED E. MATHIAS BOTANICAL GARDEN, see page 59

APR. 28-29

POINT LOMA GARDEN CLUB "Dynamic Duo" Flower Show with Plant and Crafts Sale. Fri. 1:30-5:30PM, Sat. 10AM-4PM. St. Peter's by the Sea Lutheran Church Hall, 1371 Sunset Cliffs

APR. 29

MISSION HILLS GARDEN WALK

A walking tour of Mission Hills finest gardens. Advance Tickets: \$10.00, Day of Event \$15. 10AM-4PM. 619/543-0532.

APR. 29-30

SAN DIEGO BONSAI CLUB

36th Annual Spring Bonsai Show. 10AM-5PM. Lecture at 11AM, and demonstration at 1PM both days. Casa del Prado, Room 101. Bonsai trees, pots, accessories, and plants for sale. Free.

APR. 29-30

SAN DIEGO ROSE SOCIETY 72nd Annual Show and Sale. Balboa Park Club Building, Balboa Park. Sat. 1PM; Sun. 10AM-4PM. Admission Fee.

APR. 29-30

SAN CLEMENTE GARDEN CLUB

47th San Clemente Standard Flower Show and plant sale. San Clemente Community Center. Sat. 1-5PM, Sun. 11AM-4:30PM. 949/498-1795 or 949/661-5908.

APR. 29-30

FRIENDS OF FULLERTON ARBORETUM

27th Annual Green Scene Garden Show and plant sale. Sat. 9AM-5PM, Sun. 10AM-4PM. 1900 Associated Rd. Fullerton.

ONGOING EVENTS

QUAIL BOTANICAL GARDENS 230 Quail Gardens Drive, Encinitas. Garden Tours & Events. 9AM-5PM.760/436-3036 or check Web site www.qbgardens.com.

BLUE SKY ECOLOGICAL RESERVE Walks. Poway. Sat. & Sun. 9AM. Call 858/679-5469. WALKABOUT INTERNATIONAL Local Guided Walks. Newsletter. 231-SHOE. Free.

THE HUNTINGTON "Tea & Tour" Package. Tues. and Wed. mornings 10:30AM Sept. thru May and 9AM June thru Aug. \$24, advance reservation required. 626/405-2126.

SAN DIEGO HORTICULTURAL SOCIETY

Lectures. Satellite Wagering, Del Mar Fairgrounds. Mar. 13 and April 10. 6:30-9:30PM. 760/630-7307. CUYAMACA COLLEGE Water Conservation Garden Landscape Seminar and docent-led garden tour. 2nd Saturday of each month. 9:30AM. 619/660-0614. Free.

Deadline for submission to

HORTICULTURAL CALENDAR for MAY/JUNE issue is March 15. SAN DIEGO FLORAL ASSOCIATION is not responsible for changes that are submitted late by the organizations.

Gleanings . . .

TRANSPORTATION . . .

Flower shops in the mid-1800s obtained their flowers from local growers. By the turn of the century the train made it possible for cut flowers to be acquired from long distances. Our own Kate Sessions and her brother raised plant material (and poinsettias) that were shipped by train to large eastern cities. With the development of refrigerated cars, huge rose gardens were started in California and the flowers were sent year-round to the eastern markets. The next big change in the cut-flower market occurred after World War II when the interstate highway system was built. Large refrigerated trucks took over much of the transportation of flowers from growing fields. The last big change was the expansion of cargo airplane service. Flowers can be grown overseas, especially in South America, at a much lower cost (water and labor) than in the United States. Many of the flowers sold today are shipped from Columbia and Ecuador.

WEATHER . . .

By painstakingly counting the rings of gnarled trunks of timber pines on Mt. Baden-Powell near Los Angeles, dendrochronologists (tree ring counters) have found that some of the trees are 1,200 years old. (The oldest living trees known today are the 4,765-year-old bristlecone pines that are found at the 14,000 foot level of the White Mountains on the Nevada state line.) The rings of the pine indicate the years and the width of the rings indicate the climatic conditions of the year. The rings grow more during wet years. It has been determined that these old trees have grown more in the past twenty years than during the past 1,000 years. Researchers feel that it is not the moisture, but the nitrogen deposited on the soil by air pollution or by the increase of carbon dioxide in the air that causes the growth.

Tree rings are valuable tools for climate study in the Northern Hemisphere; it is not as useful in the Southern Hemisphere because much of the land is tropical. In the tropics many tropical trees do not live long and do not make annual rings.

Not all researchers concentrate on climate. Some use the information to explain the climate's effect on human civilization.

Dendrochronologists take core samples the size of a large chopstick to count rings.

Tree rings, coral reefs, and pollen trapped in muddy lake sediments are used by scientists to estimate temperature and rainfall patterns thousands of years ago. If they want to understand natural climate changes they must look at changes before the industrial revolution, the period when heavy air pollution from burning of fossil fuels began.

VIAGRA . . .

It has been discovered that when the drug Viagra is placed in the solution in which cut flowers are placed the vase life will be extended by at least seven days. Further studies are being done to find other uses in the floral industry.

CAESAR . . .

Julius Caesar is credited with beginning the plant forcing industry.

Why? He demanded a cucumber each day and his gardeners learned to force plants to produce the daily ration. Apparently the art of forcing plants to produce early has been developing ever since. In the early 1600s forcing houses became very popular in France after Louis XIII demanded fresh vegetables and fruits. Soon large conservatories were built all over Europe to grow tropical fruits for Europe's nobility.

The early greenhouses were called forcing houses because they were used to force plants to grow earlier than they would in the open garden. They became more widespread in the 1800s and early 1900s when glass became more readily available. By the 1960s greenhouses became less expensive and more widely used because of the development of film plastic.

Commercial growers, especially in colder climates, not only grow flowering plants but food produce in greenhouses. In private home greenhouses, both food and ornamental plants are grown. In San Diego, we can grow food plants in the open garden year around. There are many home greenhouses, here but the owners are usually growing orchids or some exotic tropical plants.

WILD RICE . . .

A Wisconsin resident has informed us that there is still a large amount of wild rice (Zizania) harvested in Wisconsin. The grain grown naturally in the wild tastes differently and is lighter in color than the cultivated grain. Wild rice is not botanically a rice but has probably been called rice because it grows in water.

THE LAKES OF THE FLOWERS, PART I

BY PETER DARGUSCH

BUILT FOR THE 1915 Panama-California Exposition, the Balboa Park lily ponds have been through many changes over the vears. Once referred to as Las Lagunas de las Flores (or The Lakes of the Flowers), they were designed to be aquatic gardens and reflecting pools. Last year was a year of renovation



Large Pond South of the Botanical Building

and repair for both ponds. After draining and cleaning the ponds, leaks were patched in the concrete linings. Deteriorating planter boxes and leaky valves were replaced, and fertile soil was added to the beds and boxes. The gravel biofilters for both ponds needed work, too. The gravel was removed, and a larger grade gravel was brought in to improve filtration. With the renovation complete, the ponds were filled and the filtration system was activated. The system requires several weeks to begin functioning properly. Algae and bacteria multiply in the water and in the gravel filter itself, aiding the filtration process. An algal bloom occurs, then gradually disappears as the filter reaches efficient operation.

There are many aquatic plants in the ponds, but the featured plants are the water lilies (genus Nymphaea) and the lotus (genus Nelumbo). There are two basic subgroups of waterlilies, the heat loving tropicals and the hardy lilies (native to cooler climates.) In general, tropical blooms rise above the water, while hardy blooms lie close to the surface or float on the water's surface. Tropical blooms are typically larger, more showy, and more fragrant than hardy blooms. Blues and violets are found only among the tropicals.

Hardy lily rootstocks are rhizomes, most of which grow laterally, while tropicals form upright tubers. Both tropical and hardy lilies are perennials, with hardy lilies easily surviving San Diego's mild winters. Over twenty

hardy cultivars were planted in the ponds, with blooms in shades of red. pink, white, yellow, and changeable hues. The four red cultivars in the ponds show similar characteristics and require a discerning eve to distinguish them. Nymphaea 'Arc-en-ciel' a pink lily with stellate flowers is notable for its unusual variegated color patterns on

leaves. N. 'Gonnere', a white lily, and N. 'Peter Slocum', a pink lily, are distinguished by the large number of flower petals per bloom. N. 'Joey Tomocik' holds its yellow flowers above the water, usually a tropical trait.

Although many tropicals can overwinter in the ponds, some require warmer temperatures to survive. *Nymphaea* 'Panama Pacific' produces a deep purple flower with a contrasting yellow center. This cultivar is viviparous, with plantlets occasionally forming on the leaves. It is a fragrant lily that can tolerate cooler temperatures. *N.* 'Blue Goddess' has a light blue to violet petal color with a darker center. This cultivar produces small tubers at the base of the main tuber, which can be removed for propagation. *Nymphaea gigantea* var. *alba* is a tropical species native to Australia and produces huge white flowers. All three of these tropicals are day-bloomers growing in the large pond.

There are two known species of lotus, *Nelumbo nucifera* and *Nelumbo lutea*. Growing at the south end of the large pond is *N. nucifera*, the sacred lotus. The tuber is edible, and the flower is exceptional, with large pink and yellow flowers rising far above the water. Lotuses begin growing later in the spring than water lilies. Two cultivars planted in the small pond are *Nelumbo* 'Pekinensis Rubra' the red lotus and *N.* 'Perry's Giant

Sunburst', a popular yellow lotus with prolific blooms.

The growing season for lilies and lotus in San Diego can vary somewhat depending on climatic conditions. They grow and bloom throughout spring and summer, and as water temperatures cool in the fall they enter a dormant period for the winter. As water temperatures rise in early spring they begin to grow and bloom as the ponds resume their roles as "The Lakes of the Flowers." □

Peter Dargusch is a City of San Diego Park and Recreation Dept. gardener who takes care of the lily pond in Balboa Park. Photographs by the author.



Nymphaea 'Arc-en-ciel', pink hardy - variegated leaf



Nymphaea 'Blue Goddess', blue-violet tropical



Nymphaea 'Panama Pacific', deep purple tropical



C O P A - D E -ORO

BY BARBARA S. JONES

COPA-DE-ORO, SOLANDRA MAXIMA, is one of the oldest decorative vines grown in San Diego. The name translated is cup-of-gold. It can grow to forty feet. It has large, leathery, dark green leaves and beautiful large trumpet shaped flowers that bloom a light gold color and become a true rich gold. The flowers are about 10 inches long and 6 inches across and have a lovely scent at night. The heaviest blooming period is from February through April.

This is a big plant that has woody stems that need a strong support. It grows easily in well-drained soil and it needs full sun. It will be damaged by freezing but will usually recover. It can stand heavy winter pruning and makes a wonderful cover over trellises and pergolas. It also can be used for a hedge. It can tolerate salt spray and wind and fog.

The one pictured is at the Photographic Arts Building on Village Place in Balboa Park. It was planted for the 1935 Exposition. The stem is about 16 inches across and grows out of a small dirt area in the brick deck.

The copa-de-oro commonly grown in San Diego is native to Mexico, but other varieties are found in Central America, Venezuela, and Columbia. The first ones in the area were planted in Old Town San Diego and still can be found. The vine is a handsome addition to a red-tiled Spanish house.

Newcomers often hear the name "copa-de-oro" and jump to the conclusion that this is the Spanish name for our native California poppy. The poppy has always been known as a poppy. □

Barbara S. Jones has been gardening in San Diego for over sixty years and writing for California Garden for thirtyone years. Photographs by the author at the Photographic Arts Building in Balboa Park, San Diego



Vireya rhododendrons are native to equatorial areas of Southeast Asia and the East Indies. The individual florets of these lovely tropical plants may extend from a fraction of an inch to five inches across. Colors range from pastels and white to deep watermelon red: they are often fragrant, some blooming fall, winter, spring, and occasionally in summer. One is doing well in east El Cajon Valley.

VIREYAS, PART I BY JAMES E. JAEGER

DESPITE THEIR BEAUTY, WARMTH, color, fragrance, and number, the Vireya series of Rhododendron has been largely ignored for the last century. They were first discovered in 1843-4 by Thomas Lobb in Java and Borneo while he was collecting for Veitch and Sons Nursery of Chelsea. outside of London. A flurry of hybrids, over two hundred, were made by the end of the nineteenth century. World War I came along and taxation broke up the large estates in England where Virevas had been raised in conservatories. The discovery of the cold hardy lepidotes and elepidotes from the high mountain areas of Tibet, Southern China, Himalayas, and America further pressed Vireyas into the background. Sir George Holford of Westinburt, Lionel de Rothschild of Exbury, and Lord Aberconway of Bodmont continued to raise Vireyas, saving some dozen hybrids for posterity.

Sir Isaac Bayley Balfour divided the *Rhododendron* genus into forty-five series to group plants as an aid for horticulturists. Surprisingly, he left out Vireyas, which comprise nearly one-third of the genus *Rhododendron*. One explanation might be that he was working only from material already in collections around England.

It was in 1930 that R.E. Holtum, director of the Singapore Botanical Gardens, collected and hybridized Vireyas from Java and the Cameron Highlands, Malaysia. The Japanese invasion terminated his efforts and all his hybrids were lost.

In the 1950s Dr. Herman Sleumer, a German working out of the National Herbarium in Leiden, Netherlands, discovered hitherto unknown Vireya species in New Guinea. In May of 1961, his expedition, cosponsored by the American Rhododendron Society, discovered and introduced hundreds of new species. After being released from the USDA quarantine, they were distributed throughout the United States to places where it was thought they would grow. One of these was



the Strybing Arboretum in San Francisco's Golden Gate Park.

"Jock" Brydon, director of the Strybing, acquired many of these species and appointed Pete Sullivan as the one in charge of the greenhouse where they were kept, to care for and hybridize them. Roy Hudson became director in 1969 and continued an active interest in the Vireyas. Vireya plants were distributed to interested members of the American Rhododendron Society up and down the West Coast.

In the early 1970s, after a number of new hybrids had matured, a decision was made to plant the Vireyas outdoors. December 1972 had temperatures in the low 20's; many Vireyas died. Interest in the plants disappeared for a time. Pete Sullivan tirelessly continued building the collections from what he had left. In 1978 a San Francisco City Employees strike motivated someone with a key to the greenhouse to abscond with a major portion of the collection, never to be seen again. Having experienced enough disappointment, Pete Sullivan took an early retirement but continues to grow and hybridize from his home. Now the Strybing collection of Vireyas is a mere shell of what it was in the "Golden Years" of the early to mid 1970s.

In 1975, the Southern California Chapter of the American Rhododendron Society was formed specifically to grow Vireyas. Bill Moynier, a prolific hybridizer and former Lunar Surveyor engineer at Hughes, produces many new hybrids. Carl Deul and his mother were the first president and treasurer. Carl had his eye on the nursery aspects of growing Vireyas, but after a dozen years gave up. Bill Moynier had a backyard nursery called Vireya Specialty Nursery, but he, too, gave up after retirement. Fred Renich in Camarillo had aspirations for a nursery for Vireyas but, after a severe

frost in Simi valley, he, too, gave up.

Throughout the 1980s the Chapter focused on establishing collections in various botanical gardens around Southern California: UCLA Mildred Mathias Garden, The Huntington Botanical Gardens, Descanso Gardens, and Sherman Gardens. All are successful except Descanso, whose collection was wiped out in January 1999 by severe frost—perhaps because they were planted at the lowest point in the garden. We'll try again higher up.

The future of the Vireyas lies in hybridizing the species to create more compact, more floriferous fragrant flowering plants. They do not hybridize except on rare occasions with the more cold hardy lepidote and elepidote rhodies from the North. Because they come from areas around the equator, year-round bloom occurs in many varieties and hybrids.

The culture of Vireyas depends on creating aeration, an acid soil environment, and protection from extremes of heat and cold. All of these are doable here in Southern California, especially coastal areas. Shade is a must for prevention of sun-scorch on hot dry days. Root rot occurs because of overwatering; let them dry out between waterings. Mild fertilizers are beneficial—cottonseed meal or fish emulsion work well.

Pests are: mites, thrips, mildew, and leaf chewers. All can be dealt with in the usual ways.

The Southern California Chapter of the ARS meets every 2nd Friday at 11000 National Blvd., St. John's Presbyterian Church Auditorium, West Los Angeles at 8:00 PM, September through May. You can join, buy plants, make friends, learn how to solve your cultural problems with Vireyas, etc.

You may join the ARS by sending \$28 for a year's subscription to the American Rhododendron Society, 11 Pinecrest Drive, Fortuna CA 95540. This includes membership in a local chapter and four issues of the ARS journal. □

James E. Jaeger is a semi-retired landscape contractor. He belongs to several diverse plant societies and is president of the Pacific Palisades Garden Club. He volunteers at The Huntington and has been growing Vireyas for twenty years.

[Editor's note: Next issue the magazine will have further information on growing Vireyas and sources for plants and seeds. Monrovia Wholesale Nursery in Azusa propagated thousands of these mild climate plants and sold all within two weeks. They are propagating again, and say the Vireyas will be available in San Diego.]

PROBLEMS FOR BIRDS

Birds and Window Collisions

Contemporary homes and modern office buildings often use insulated and reflective glass to replace walls. These windows may be aesthetically pleasing to humans, but often they are lethal to birds. Unfortunately, many birds cannot distinguish the difference between the real sky and a reflection of the sky in a window.

In the United States alone, it is estimated that each year during migration, millions of birds fly full tilt into windows and are seriously injured or killed.

You can minimize these collisions by breaking up the reflection on the **outside** of the window with a window screen, flash tape, and bird netting.

Life-size, animate "scares" (plastic falcons, owls and balloons) and falcon or owl silhouettes attached to windows with suction cups are not effective deterrents.

Planting trees and installing window awnings to block the sun from hitting the window may eliminate some reflection.

Migration isn't the only time homeowners have trouble with bird-window collisions. Birds may hit your windows during breeding season, and in the winter too.

During breeding season, male cardinals, woodpeckers, and mockingbirds may "fight" their own reflections in windows (and car mirrors). They'll stop banging into the window as the breeding season ends. You can discourage them with screens and other barrier techniques.

Regardless of the season, birds can fly into windows when they're frightened while visiting a feeding station. Either move the feeders a considerable distance away from the window, or immediately adjacent to the window (so birds don't get up to flight speed before hitting the window).

Insecticides and Lawn Chemicals

If you attract birds to your yard, keep in mind that many herbicides, insecticides, and fertilizers are deadly poisons.

Ornithologists have known for several years that many lawn-care chemicals kill songbirds and contaminate their food. Mechanical and biological techniques may provide less hazardous pest control options.

Contact your USDA Extension office and the Environmental Protection Agency for information about integrated pest management, biological and chemical pest

control safety, and pest-resistant plant varieties.

Baby Bird "Orphans"

Sooner or later, no matter where you live, you'll come across a baby bird. You'll have to decide: should you rescue it or leave it to fend for itself? In most cases, it is best to let nature take its course. Don't interfere.

If the bird is fully feathered, chances are it doesn't need your help. Each spring, baby birds leave the nest and have to learn to be adults. Their parents are nearby. They're best equipped to take care of the babies. You can help fledglings by keeping your dogs and cats in the house.

If the bird is unfeathered, try to return it to the nest. If that's not possible, put the baby in a shoe box and cover it. Get the bird to a licensed wildlife rehabilitator. Do not attempt to take care of it yourself. After all, do you know what kind of a bird it is? Do you know what to feed it?

No matter what the "first aid for baby birds" books at the library say, you will kill baby birds if you offer them a diet of human baby foods, hamburger meat, tuna, bird seed, milk, hard boiled eggs, bread, or water.

Injured birds

Thud. A bird hits the window. You look out and see some feathers sticking to the corner of the pane. You rush outside and find a tiny yellow bird, still alive, lying under the window. It's not moving. What's the right thing to do? Get a towel. Gently put the bird in a cardboard box or large paper bag. Put the bird in a warm, quiet place. **Do not offer first aid.** Do not offer food or water. Get the bird to a veterinarian or an authorized wildlife rehabilitator (call your state wildlife agency for a referral).

Regardless of your best intentions, if you offer first aid without the proper training, you're likely to do more harm than good.

Cats

In the fall of 1990, a study on the effects of cats on wildlife was reported in the scientific and mass media. Researchers estimated that house cats and feral cats are responsible for killing approximately 78 million small mammals and birds annually in the United Kingdom.

Feline predation is not "natural." Millions of backyard birds and other animals are slaughtered by cats each year. Cats are a serious threat to fledglings, birds roosting at night; and birds while they're on the nest, at

the feeder, and using a bird bath.

If you are unwilling to eliminate free-roaming cats, do not attract birds to your yard by putting out feeders, nest boxes, and baths. Eliminating free-roaming cats is the best way you can "protect" your backyard birds from cat predation.

Responsible pet owners keep their cats indoors. Most local jurisdictions have enforceable leash laws for cats and dogs. [Possibly this was originally written for another area or country] Contact your local humane society for help.

Problems at the Bird Nest Box

Many homeowners invite birds to nest in their yards by putting up nesting boxes. Almost two dozen species will consider a human-made nest.

How do you make sure the "right" animal is using your bird nest?

Learn all you can about the birds you want to attract and offer them a box that opens at the top and the front or side. Monitor the nest box, and evict starlings and house sparrows.

The safest solution to insect infestations is physical removal and soaping the inside top of the box. If insects infest the box during nesting, apply a light dusting of rotenone or pyrethrin. Do not use chemical sprays.

If snakes and climbing mammals are a problem, use physical barriers to deter them. Try a PVC pipe over your metal bird house pole, or metal sheeting on a tree or wood pole. Smear the PVC or metal with Vaseline laced with hot (cayenne) pepper. Avoid automotive grease, it can be lethal to wildlife.

Put a predator guard over the nest entrance hole.

Do not use bird houses with perches below the entrance hole.

If you find birds attacking the adults, eggs, or nestlings, what you can do depends on the perpetrators. Eliminate house sparrows and starlings. All other birds are protected by federal and state laws. You may not harass or otherwise harm hawks, owls, falcons, crows, grackles, jays, and shrikes.

Feeding Station Problems

More than 82 million Americans feed wild birds. Sooner or later, these backyard bird feeders experience some problems: "wrong" birds at the feeder, no birds at the feeder, sick and injured birds, predators, pests, and the "mess."

Several factors determine which birds will visit your feeders: the type of feeder and seed you use, the

presence of predators, and how often you sanitize your feeders.

Tossing a mix of seeds on the ground is an easy way to feed birds. Just about every seed-eating bird in your neighborhood will stop by. So will squirrels, chipmunks, mice, and rats.

Any bird can feed on the ground, but in the wild few birds other than turkeys and quail find all their food there. Contrary to popular wisdom, large birds like the cardinals and doves are not "ground feeding" birds per se.

All birds will use an elevated feeder. The larger birds, with their larger feet and bodies, require large perches. Cardinals and doves will visit tube feeders, if you add a tray.

And it's healthier for these songbirds to feed at a feeder, not on the ground. Any cage bird owner and zookeeper will tell you that the ground below bird roosts and feeders is not where you want your birds to dine. It's very difficult to sterilize the ground below your feeders.

So resist the temptation to toss food on the ground. Put it in a feeder where it's dry and protected from contamination

Birds Trapped in Feeders

When they're nearly empty, some poorly designed bird feeders can actually lure the birds inside, where they become confused and may die in a panic. If you're going on vacation, never leave your feeder full. It's better to take it down, than take the chance that a bird will become trapped.

Avoid clear plastic feeders with feeding ports an inch or larger in diameter. Chickadees will squeeze inside to get that last seed, and try to fly upward and out, forgetting the entrance is at the bottom. The same can happen in a wood hopper feeder with plastic walls tight to the roof.

Squirrels

Just about any yard that has trees, is a yard with squirrels. If you feed birds, sooner or later, squirrels will cause problems.

Squirrels will eat your bird seed and, when they "feel" like it, damage your feeders. That is, unless you use safflower seed. Put it in any feeder. Hang it anywhere. Squirrels don't seem to like safflower, yet.

Who eats safflower? Cardinals, doves, chickadees, titmice, and house finches.

Want more bird variety? Use sunflower. Most seed

eating birds favor it. The problem is, squirrels do too. If you want to use sunflower, put it in a squirrel-proof feeder

You can "squirrel-proof" any feeder by putting it on a pole with a baffle (the underside lathered with Vaseline and hot pepper) about ten feet from a squirreljumping off point.

Rodents

Birds are attracted to sunflower because of its high oil content. Some of that oil saturates the shell. If you don't remove the spent shells, rodents are attracted to the smell.

The obvious solution is to rake up the shells. An easier way to eliminate the shell problem is to use hulled sunflower (also known as sunflower hearts or chips).

Storing Seed

Regardless of which seed you use, store it in a metal garbage can in a cool, dry place. Seed will turn rancid when it sits in a hot garage or shed in the summer. To avoid insect infestations in warm weather, don't store more seed than you can use in a couple of weeks.

Problems at the Bird Bath

Water attracts more bird species than any feeder or nest box. Bird baths can become bird problems when they're too deep (small birds can drown in three inches of water) or dirty (birds drink, bathe, and defecate at a bath).

Hose out the bath daily and wash it with hot, soapy water at least once a week. Add liquid bleach to the soapy water to help kill algae and bacteria.

Winter is the most important time to offer water. There's no easy way to keep water from freezing. Contrary to some reports in the popular media, glycerin and antifreeze will kill birds.

The only way to keep water from freezing is to add an electric water warmer.

Be careful with electricity and water. Use a UL (Underwriters Laboratory) listed warmer, and connect your appliance to a GFIC (ground-fault interrupt circuit) outdoor socket.□

Adapted from a US Environmental Protection Agency booklet, "Backyard Bird Problems."

"PSST, MISTER, YOU WANT TO BUY AN INCREDIBLE TREE?" BY BETTY NEWTON

TOUTED WITH EXAGGERATED PHRASES, given the names "Empress Tree," "The Lucky Sapphire Dragon Tree," or "Powton Sapphire Dragon," a gardener has to wonder if this plant (*Paulownia kawakamaii*) is half what the producers and distributors claim. Sellers' leaflets describe the plant as "Wonderful, beautiful, fast, deep rooted, grows anywhere, large pyramids of fragrant, lavender trumpet flowers, big leaves for shade. A tree with the mystery of the Orient."

We called the Los Angeles Arboretum to get the tree's track record there; read the description in several books including *Flowering Plants in the Landscape* edited by Mildred Mathias (words probably by Dr. Samuel Ayres who underwrote the book and in whose garden many of the photographs were taken); as well as three horticulturists in Balboa Park to hear their impressions.

Nobody likes to be the object of a con, but there is an urge to sell your product even in horticulture. Some retail nurseries and wholesale growers let their advertising go beyond the truth. Well, most of us are attracted by a carny's pitch: "Come one, come all, and see this incredible thing!" Fortunately some of us had been watching *Paulownia* trees in the ground (University of California at Irvine Botanic Garden) and growing them (Chris Wotruba of East County's Perennial Adventure Nursery).

A.K Finch, grower and distributor of "Powton Dragon," and "Lucky Dragon" trees, states they were bred and named in Australia, first released in 1988. Bred to meet height limitations in new housing developments, The "Powton Dragon" is a cross between *Paulownia tomentosa* and *P. elongatum*. It reaches 25-30 feet. They no longer produce that tree, considering the 35 to 40-foot "Lucky Dragon" to be better growing and prettier. Originally they did expensive meristem culture in sterile flasks but now find cuttings are easier. Both strongly resemble *P. kawakamii*.

Here's where reality differs from the sales talk. 1) While *Paulownia tomentosa* or the smaller *P. kawakamaii* may have a 4-foot deep tap root, they have aggressive surface roots that interfere with groundcovers. 2) Whereas the tree may have lovely wood good for cabinet work, it is not strong enough for home building. The limbs are brittle. (Dr. Jerrold Turney, plant pathologist, Los Angeles Arboretum) "What do you expect from a fast growing tree?"

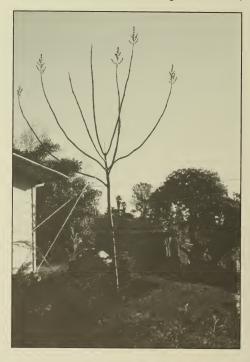
While the Empress Tree grows like the plant in

"Jack and the Beanstalk", perhaps 10 feet the first year, it looks in winter like a sparsely branched stalk of asparagus. This is not a graceful plant. It is deciduous. The leaves burn in wind.

You are not really gullible; at least you try not to be. You know you may not have room for a 36-foot tree (in 5 years) or a 60-foot tree (the larger species *P. tomentosa*). You may or may not may see *Paulownia* as a quality tree. But, in bloom (starting before the leaves come out, the effect of its huge lavender flower trusses is spectacular) the public loves it.

Read Jimmy Greene of Santee here about his experience. It is not what happens when you plant a Chinese elm or California pepper.

To me the Sapphire Dragon tree, *Paulownia kawakamii*, is a weed. It grows too fast and sticks straight up in the air. The dinner plate to trash can-lid-sized leaves (rather like oversized, heart-shaped *Catalpa* leaves but sometimes lobed) look coarse to me. Now, were I responsible for the acreage of Winterthur,



the expansive Henry Dupont Museum and English Landscape School garden in Delaware, I might plant it as they have (in a protected spot that drains well and gets enough moisture). The proportions of the flowing hills there can accept this tree and no one is looking at it close up.

In spite of the wholesalers' claims of requiring meristem culture (a form of cloning) there seems to be no need for that. *Paulowinas* grow easily from seeds or root cuttings. Those pods on branch tips through winter are not seed pods, they are flower buds.

Sue Fouquette, retired supervisor of San Diego's Balboa Park Nursery; and her successor, John Millein; Kathy Puplava, horticulturist for the park; the staff of this magazine; and Los Angeles Arboretum personnel could not discover any ways this advertised tree differs from *P. kawakamii*. The public did love it when it was in bloom over on Balboa Drive, at Quince Drive, where it has been planted about three years. They called, "What is that?"

Maybe we'll all wake up in ten years and find the "Lucky Sapphire Dragon Tree" - "Powton Sapphire Dragon" is a significant refinement on the *Paulownias* we have known. From watching the four young trees within a mile of my house—all eleven to fifteen feet tall—bought as 1-gallon plants from Home Depot, I'd say it's the same old, same old.

"Stand back," they cry. "Here comes that gawky tree with the beautiful fragrant lavender flowers!"

★In fairness to *Paulownia*, we tell you that it won an Award of Horticultural Excellence prize in April 1996 at the always excellent Coronado Flower Show. "No one knew the tree, but they thought the flowers were beautiful," said one of the judges.□

Betty Newton teaches gardening classes at Grossmont Adult School and writes for the Sunday <u>San Diego Union</u> <u>Tribune</u>. Photographs of <u>Paulownia</u>s by the author.

LIVING WITH PAULOWNIA TOMENTOSA

BY JIMMY GREENE

WHILE SHOPPING AT A home improvement center about four years ago, I bought a tree in a one-gallon container. It wasn't cheap, about twenty dollars, and only about a foot tall, but if the claims made on the pamphlet with it were true, it would be well worth the

expense. It was named the POWTON SAPPHIRE DRAGON TREE, and the documentation claimed that it would produce beautiful purple flowers within two years and grow to thirty feet tall within four or five years.

I planted it in late June and watched it grow to a meager three feet by November. An early frost made it lose its leaves, and I assumed that it had gone to the big tree farm in the sky. I had forgotten that the thing was deciduous.

After it lost its leaves, I simply pulled it from the ground and stuck it in a gallon container with some nearby sandy soil. It was then relegated to a corner of the garden where it wouldn't be too conspicuous.

The next spring it began to bud. I was amazed. I hadn't given it so much as a drop of water or food, and completely ignored it. I figured that if it was this much of a survivor, I might as well give it a second chance.

I dug a hole just large enough to bury its roots (there were only three or four), and covered it up. There was no special attention given to the depth of the hole nor to the quality of soil in which it was placed (quite rocky and dry). A single gallon per hour drip emitter was placed at its base, and then it was ignored once more. Apparently this thing thrives on mistreatment.

By the end of the year, it had split into two trunks and reached a height of about eight feet. The following year it continued to about fifteen feet and sprouted buds at the ends of its branches.

The fourth year the buds became pecan-sized and grew into conical clusters of about thirty or so. The leaves sprouted, then the flowers emerged from the buds. It was a spectacular sight; dinner-plate-sized leaves highlighted by foot-long sprays of beautiful lavender, trumpet-shaped flowers. I decided that my twenty dollars were well spent.

An additional bonus was the annual supply of saplings that emerged from the place that the tree had been originally planted. In the first year, one grew to about six feet! I transplanted one growing next to the older tree after the third year. The older tree had grown such a broad canopy that I realized there would be too much shade with two of them. I was fearful of creating a new climatic zone in my yard.

In the fourth year one of these new sprouts grew to eight feet in height before the summer had ended! I pulled it out and a new one replaced it and grew to five feet by the time spring had ended.

Before the onset of the flowering cycle, I was ecstatic to have the huge leaves fall and provide instant mulch for me. After the first year of flowering I wasn't sure if I were at all too happy with what was now apparently the full growing cycle.



After the flowers drop, a fruit grows in its place. This produces a grape-like group of these pecan-sized fruits. This wouldn't be so terrible if they were edible! Instead, they are covered with a fine coat of super-glue. When they drop, you have a **hugh** pile of glue-covered fruit that are of absolutely no practical use. Oh, joy!

Now the tree is over twenty feet high with a canopy of similar size. It provides a great roost for birds and is easy to trim. The branches are brittle enough to snap off at their base even at 4" in diameter. It's a love-hate relationship. All's well until the glue-pods emerge and we have to get rid of them, otherwise the beautiful leaves and flowers bring us months of enjoyment during the year.

They are often available at Home Depot, and I can only imagine that their source is a guy who bought one from some importer. He probably kept pulling them out and ended up with a grove of them. Most certainly he began to sell them to pay for the glue remover he has to buy to clean up his gardening tools and gloves.□

[Editor's note: This plant is native to China. The common name is empress tree. In the U.S., it has escaped from cultivation and has become acclimated from New York to Georgia. In China, it is used medicinally and for washing the hair and skin. It can be grown from seeds.]

Jimmy Greene and his wife are rather new to gardening. They have been struggling for five years with a big, empty back yard, spending weekends there. They also collect and sell antique advertising at A & J Trade Cards on the Internet.

www.inetworld.net/jgreene/index.htm

SAN DIEGO FLORAL ASSOCIATION CLASSES

On Tuesdays, 9:30AM-2:30 PM Room 104, Casa del Prado, Balboa Park Students shoud bring proper tools and lunch. Preregistration required, call Marie at 619/298-5182.

BASKETRY

Sadie Hawkins Day Basket, two-ringer—February 29 Bottle Basket, made from Dracaena Draco—March 7 Josephine Knot Basket (new style), made of delicate reed—April 11 Basket Repair—April 25 and May 9 (\$5.00 each)

GOURDS

How to Construct and Hand-Decorate a Bird Feeder or Birdhouse from a Gourd-May 16

FLOWER ARRANGING

All Green for St. Patrick's Day—March 14
Three-Day Flower Arranging Course—Mar. 21, 28, Apr. 4
Create an Arrangement of your Own for the Holiday Directed by
Velma West—April 18

Sorry we are not supplying more information, refer to the newsletter or call 619/298-5182 or 232-5762.

California Nativescapes Botanical Garden Guided Tours Spring 2000

March 11th, April 8th, and May 13th 10:00 a.m.

> San Diego Wild Animal Park Free with Admission call (858) 487-2629 for info

Lake Hodges Native Plant Club



Now is the Time . . .

A CULTURAL CALENDAR OF CARE FROM OUR AFFILIATES, UC COOPERATIVE EXTENSION, AND CALIFORNIA GARDEN STAFF

AFRICAN VIOLETS Helen LaGamma

NOW IS THE TIME

TO WATER only when soil is dry when watering from the top.

TO KEEP all areas clear of plant clutter. Use only clean sterile equipment. Have the area well ventilated. **TO PROVIDE** 12 to 14 hours of indirect lighting daily.

TO PROTECT plants from any sudden change in temperature—maintain 65-75°F.

TO POT UP babies in 2½-inch pots using a light, porous, sterile soil with good drainage.

TO PRACTICE preventive measures against insects and disease—have clean hands and clothing.

BEGONIAS Margaret Lee

NOW IS THE TIME

TO PUT down tubers to sprout.

TO CLEAN all pots and plantings of dead wood, leaves, and old debris.

TO PROTECT roots with a mulch.

TO START feeding; give ¼ strength of any good allpurpose plant food if feeding once a week, ½ strength if twice a month; full strength if once a month.

TO CONTROL disease and pests by spray and bait.

TO KEEP plants moist, but not wet.

TO START new plants from leaves, cuttings, or seeds.

BONSAI

San Diego Bonsai Club

NOW IS THE TIME

TO ADJUST watering program according to the rains.

TO GRAFT deciduous plants.

TO REPOT plants; shape to conform to the container.

TO REMEMBER deciduous flowering plants need repotting every year, except quince. Conifers may go three to five years without repotting.

TO ADD small amounts of chelated iron or acidifying preparation to correct alkaline (salt) buildup.

TO WATCH for aphids and other pests.

TO WAIT until April to feed. Use a high nitrogen fertilizer for foliage growth; high phosphorus type to set flowers and fruit.

TO USE ¼-strength fertilizer spread several weeks apart, rather than using full strength only once. Measure accurately. Too much fertilizer can burn roots and cause leaf damage.

BROMELIADS

Bromeliad Study Group of Balboa Park NOW IS THE TIME

TO CHECK plants for scale especially during spring when scale is most likely to appear.

TO TREAT plants with scale by dipping or spraying them thoroughly with a solution of Cygon 2E according to directions on the label. Drain excess solution from plant.

TO KEEP plants clean. Cut spent blooms and dead leaves.

TO REPOT your favorite plants in new potting media. This helps them to develop a healthier growth. TO ALWAYS provide good drainage and never allow the soil to become soggy.

TO FERTILIZE only during the warm months, once a month, preferring a fertilizer high in acid. Use ½ the recommended strength on the label.

CACTI AND SUCCULENTS Joseph A. Betzler

NOW IS THE TIME

TO PREPARE plants for spring growth by checking soil and pot condition—transplant if needed. Soil mix should be light and water should flow through freely. TO FERTILIZE your plants regularly.

TO START acclimating the protected plants to outdoor conditions once again, after danger of frost is gone.

TO PROTECT sensitive plants from the rain and sun; bright sun can burn indoor plants.

TO KEEP newly purchased plants separated from your collection until they show signs of good growth without any pests or disease; treat any pest immediately, watch for snails also. The wet winter might bring you rodents; mice and rabbits are cute but no cacti are safe from their nibbles. Protect your plants.

CAMELLIAS SAN DIEGO CAMELLIA SOCIETY

NOW IS THE TIME

TO KEEP picking up spent blooms and petals to prevent petal blight.

TO START your pruning program after the plants have finished blooming.

TO CONTINUE to feed iron and 2-10-10 fertilizer for dark green leaves and root development.

TO LOOK for aphids and loopers and if found spray with malathion.

TO START to feed using a program with cottonseed meal

DAHLIAS Abe Janzen

NOW IS THE TIME

TO PLACE tubers in starting medium such as vermiculite or sand. Keep in a warm place to sprout; beware of too much moisture.

TO PREPARE the planting area by adding humus and fertilizer.

TO PLANT sprouted tubers, sprout side up, six inches below ground surface, two inches from stake, and cover with two inches of soil.

TO MOISTEN, but do not keep wet.

TO PROTECT new growth from snails.

TO BE SURE to drive stake into ground before planting tubers.

EPIPHYLLUMS (Orchid Cactus) George French

NOW IS THE TIME

TO FEED epiphyllums with a low nitrogen fertilizer.
TO CHECK trellis to be sure plants are well secured.

TO GIVE plants filtered sunlight to encourage development of buds.

TO BAIT for snails. Granules have proven effective when placed at the base of the plant. They leave little or no residue.

TO CHECK for drainage in April. Do not move plants at this time, but continue to feed for bloom; use Hi-Bloom or bloom-builder type to promote healthy buds and bloom.

TO TAKE cuttings.

TO REMOVE buds from a new plant; that energy needs to go to the root system.

FERNS

San Diego Fern Society

NOW IS THE TIME

TO FERTILIZE with high nitrogen liquid or pellets. TO REMOVE dead fronds.

TO CATCH rain water for plants in covered areas.

TO DIVIDE, repot, or add leaf mold to those plants needing it.

TO SPRAY for aphids and scale.

TO PLANT spores.

TO USE vitamin B₁ after dividing; use per instructions on label.

FRUIT TREES AND VINES

Vincent Lazaneo, Hort. Advisor, UC Coop Extension NOW IS THE TIME

TO IRRIGATE when new growth begins, if the soil is not moist, to a depth of 3 feet.

TO APPLY fertilizer high in nitrogen. Most mature fruit trees require the equivalent of one pound of actual nitrogen annually. Divide the amount of fertilizer required into three equal lots and apply them six weeks apart, starting in the spring after new growth begins.

TO BEGIN thinning fruit of apples, pears, and stone fruit when they are about ½" in size. Space fruit 4 to 6 inches apart or leave one fruit per spur. Thin early maturing varieties earlier and heavier than late maturing varieties.

TO CHECK trees for pests. Wash foliage periodically with a forceful spray of water to dislodge aphids, spider mites, and whiteflies. If a pesticide is needed, use a chemical that has short residual activity, such as insecticidal soap or pyrethrin to protect beneficial insects.

TO KEEP ants off trees by wrapping a band of heavy paper around the trunk and applying a barrier of Tanglefoot on it, or by scattering diazinon granules on the soil around the trunk.

TO SPRAY apples after bloom to control codling moth (wormy fruit). Apply diazinon after petals have fallen and twice more at two-week intervals.

TO APPLY sulfur dust to control powdery mildew on grapes when new shoots are 6, 12, 18, and 24 inches long. Then, every two weeks or as needed until harvest.

FUCHSIAS

NOW IS THE TIME

TO PRUNE plants not done earlier.

TO PINCH new growth on plants pruned earlier. As the third set of leaves forms on new growth, pinch out the terminal set. This will result in a bushier plant.

TO FERTILIZE with any good balanced fertilizer.

TO WATCH for insects and treat accordingly.

TO WATER thoroughly the day before spraying.

TO CONTINUE taking cuttings from prunings.

TO CLEAN up fallen leaves, blooms and other trash.

GERANIUMS (Pelargonium) Carol Roller

NOW IS THE TIME

TO WATER thoroughly when plants become somewhat dry. Allow excess water to drain away. Keep foliage as dry as possible. Provide the best possible drainage. Watch for botrytis (gray mold) and treat it immediately.

TO CONTINUE feeding with a balanced fertilizer containing micronutrients. Dissolve in water, using less than the recommended amount as often as needed to keep the plants growing well. As the soil becomes warmer, long-term pellets may be used.

TO CONTINUE pest and disease control, using all products according to the manufacturers' directions.

TO PRUNE ivies and zonals if they have not been pruned. Avoid cutting regals, scenteds, and related types because their flowers will be lost by pruning them at this time.

TO MAKE cuttings from the ivy and zonal prunings, if desired.

TO REMOVE faded flowers and old, discolored leaves.

TO ROTATE pots regularly to produce well-shaped plants.

GREEN THUMB ITEMS

NOW IS THE TIME

TO CUTBACK to the basal foliage some herbaceous perennial plants: mums, columbine, coreopsis, some true geraniums, ornamental grasses, evening primrose, many salvias, and Shasta daisies.

HERBS John Noble

NOW IS THE TIME

TO DIG and amend the soil in any open areas of your herbal beds and borders.

TO FEED all your perennial herbs a little compost.

TO VISIT herb nurseries for starters and seeds. Try growing some annuals from seeds — abcd...anise, basil, cilantro, dill...

TO PRUNE back overgrown lavender, rosemary, thyme, lemon verbena, chaste tree, ...

TO PROTECT young plants from snails. Use organic practices, especially in an herb garden. Experiment with hand picking, beer traps, bran, copper barriers, and/or invite some possums for a midnight picnic.

TO HARVEST from our native herbs — sagebrush, white sage, black sage, Cleveland sage, yerba mansa, yerba santa, elderberry,...

TO MAKE fresh herbal bouquets with mint, thyme, rosemary, sage,... Fresh or dried they make great

gifts for your gourmet friends.

IRIS

San Diego/Imperial County Iris Society NOW IS THE TIME

TO START feeding low nitrogen, all-purpose and liquid fish fertilizers.

TO WATER regularly if no rain.

TO CLEAN beds and keep weeds under control.

TO WATCH for pests—systemic sprays applied as a drench will usually free iris of aphids and thrips.

TO GIVE Japanese and Louisiana irises an application of an acid food—a camellia-type fertilizer is convenient to use.

NATIVES Jeanine De Hart

NOW IS THE TIME

TO VISIT a botanical garden, go for a trip to the desert, or visit friends that have natives and see how beautiful they are! If you haven't been to Rancho Santa Ana Botanical Garden, there is no better time than spring.

TO REMEMBER to bait for snails or, if you rather not use poison, pick them off and drown them. An alternative method is to spread bran. They are attracted to it. It swells up inside them and kills without poison.

TO PLANT some of the more hardy natives if the weather is cold and rainy. Don't try planting *Dendromecon*, *Fremontodendron*, or *Trichostema* this late in the season.

TO NOTE places where natives can be added next year. Perhaps a place where the hose doesn't reach. A Very drought tolerant native such as the *Salvia*, *Ceanothus*, or *Arctostaphylos* would love it.

TO CONTINUE with supplemental water until the weather warms, usually by May. Taper off gradually until you're watering about every three weeks by summertime. If you live on the coast and have sandy soil watering can be continued with no ill effects.

TO FERTILIZE your plants at ½ the recommended dosage if you haven't done so already.

TO ENJOY your garden. Take a book and a chair out, sit in your garden. Enjoy the sight, the smells and the native birds it will attract.

ORCHIDS

Charles Fouquette

NOW IS THE TIME

TO REPOT Cattleya plants that have exceeded their pots and are showing new eyes.

TO MOVE Cymbidium plants that are in spike to a

shadier spot to lessen fading.

TO PROTECT Cymbidium plants from possible hail and rain.

TO SET OUT slug and snail bait, check for red spider, scale, and mealybug. Try to keep ants out of your domain: they bring aphids and other pests.

TO CONTINUE even fertilizer feeding of *Phalaenopsis*: plants in bloom should be protected from drafts.

TO GROW the *Oncidium* alliance, *Odontoglossum*, *Brassia*, etc. with some research. Air movement, light, feeding, and good sodium-free water are some requirements for successful growing.

TO CHECK air cooler and fans; they may need oil. TO FLUSH and reset any water filters or reverse osmosis units.

TO WATCH for plants that may get sunburned and protect them.

ROSES

Marianne Truby

NOW IS THE TIME

TO WATER deeply to encourage your bushes to produce strong stems and healthy foliage.

TO WATER roses the day before feeding or spraying and again after feeding.

TO VARY the products used to provide the essential nutrients and micro-nutrients for your roses. Roses require a balanced diet to produce the blooms for which we grow them. High nitrogen will produce unusually tall bushes, which in many cases appear out of place in our home landscape, and that has contributed to too many negative comments about unattractive bushes. Along with the need for organic materials, we now recognize that nitrogen alone will seldom produce the quality and quantity of bloom we strive to produce.

TO VISIT your roses often to observe and enjoy their growth and revel in the beautiful early foliage.

TO CHECK daily for signs of unwanted pests, early signs of nutrition deficiency, and/or early weeds and grasses.

TO CONTROL aphids by washing them off with a strong stream of water from the hose in the early morning.

TO CONTROL thrips damage to blooms by using Orthinex (available in an atomizer spray) on blooms just as they begin to drop their sepals. Thrips become very active when the local uncared for vegetation dries up because of lack of moisture. Thrips distort the blooms by sucking the moisture from the petals and the bloom fails to open properly.

TO RECORD your garden maintenance efforts. Time

does fly when you're having fun!

TO PREPARE to adjust your schedule to weather conditions. Foggy cool days are certain to encourage mildew in the rose garden and an early heat wave means you must water, water, water. To a limited degree washing off your bushes in the early morning will delay mites and even early mildew.

TO LEARN rose terminology. Particularly become acquainted with the difference between a sucker and a basal break! A sucker is **unwanted** and a basal break is a beginning to a new cane, which is what we are trying to produce so we can cut off the old worn out canes at next year's pruning!

TO ENJOY your roses during these months, weather permitting, the months of glory for roses and rosarians.

TO ATTEND garden shows and appreciate all the wonderful plant materials that abound in Southern California.

TO PLAN for replacement varieties of roses during the growing season by observing carefully roses in gardens in your area. Usually roses that perform well in the coastal areas will not have enough petals to produce good roses in the inland areas. Avoid roses that are susceptible to mildew.

VEGETABLES

Vincent Lazaneo, Hort. Advisor, UC Coop Extension NOW IS THE TIME

TO PREPARE soil for planting by incorporating compost and a complete fertilizer high in phosphorus. Apply chemical fertilizers just before planting. If manures are used, apply them at least two weeks before planting and irrigate to leach salts from the surface soil. Apply twenty pounds of poultry manure or fifty pounds of steer manure per hundred square feet.

TO MAKE a last planting of cool season vegetables such as leaf lettuce, beets, and kohlrabi that will mature before hot summer weather arrives.

TO SET OUT tomato transplants after danger of frost has past. Delay planting beans, corn, cucumbers, eggplant, melons, peppers, and squash until the soil is warm. Use hot caps or floating row covers to promote faster growth.

VEGETABLES, ANNUALS

from UC Cooperative Extension Publications NOW IS ONE OF THE BEST TIMES IN FROST-FREE AREAS

TO PUT IN TRANSPLANTS OF: cabbage and eggplant.

TO PUT IN SEEDS OF: beans (lima, pole, snap).

beets, carrots, chard, corn, cucumbers, endive, gourds, kale, lettuce (leaf), melons (cantaloupe, casaba), okra, onions (green), parsley, parsnips, peas (bush), peppers, radishes, spinach (in March), squash (summer and winter), tomatoes, turnips, and watermelon — ageratum, amaranthus, balsam, canterbury bells, carnations, celosia, coleus, cosmos, daisies (African), dusty miller, four o'clocks, impatiens, lobelia, marigold, morning glory, nasturtium, petunia, phlox, portulaca, salvia, scabiosa, statice, tithonia, verbena, vinca, zinnias.

CONCERNING COVER DRAWINGS BY OUR CONTEST WINNERS

My apologies to Alex Gould for the way his drawing of *Datura stramonium* was reproduced on the cover of the January-February 2000 issue. This happened due to lack of understanding of my directions by the printer. I would show a copier copy here, but the varying shades of white and gray in the drawing don't lend themselves to reproduction by economical means.

The cover of the November-December 1999 issue also was not exactly true to the original. My fault for a dim copy to printer. Some people questioned the accuracy of the plant name given (*Aloe vera*), so we referred this to experts. Thank you to Patrick Anderson and Gary Lyons for taking time to examine the drawing. Their joint opinion was that the inflorescence shown was very accurate, but the foliage did not resemble any aloe known to them. However, they agreed that it was not a bad job for a seventh grader. Perhaps the artist was given bad information on the name.

Jacqueline Coleman

Coronado Floral Association 75th Flower Show

"Diamond Jubilee"
April 8-9, 2000

Saturday 1-5:30 and Sunday 10-4 Sixth Street and Orange Avenue

Amateur entries welcomed in all sections
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54th ANNUAL ORCHID SHOW & SALE

March 24, 25 and 26 Friday, 6pm - 10pm Saturday, 9am - 6pm Sunday, 9am - 4pm

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FAMOUS BLOOM REVEALS THE FRUITS OF ITS LABOR

THE FAMOUS "CORPSE FLOWER" that made headlines last summer is making news again. After months of anticipation and suspense, officials at the Huntington Botanical Gardens have announced that the rare *Amorphophallus titanum* has produced seeds—an event that was hoped for but by no means guaranteed.

The seeds are the result of pollination experiments conducted during the flower's brief bloom from August 1-2, 1999. It is believed to be the first time the species has ever reproduced through self-pollination (fertilization with its own pollen), as opposed to cross-pollination (with the pollen of a second plant).

"I was very skeptical that we would get any seeds," said Kathy Musial, curator of plant collections at The Huntington. "I felt it would be a miracle if the self-pollination experiment worked. But it did, and it's a botanical first."

When the giant plant bloomed at The Huntington last August, it attracted international attention. It was the first known flowering of one of these rare plants in California, and only the eleventh recorded bloom in the United States. Record numbers of visitors flocked to the Pasadena-area museum to see the botanical titan.

Native to the equatorial rain forests of Sumatra where it is known as the "Corpse Flower" because of its smell, the *Amorphophallus titanum* is commonly referred to as the largest flower in the world. It can tower to a height of up to six feet or more and open to a diameter of three to four feet. Hardly less remarkable than the flower's immense size is its exceptionally foul odor, designed by nature to attract the carrion beetles that pollinate it.

The "flower" is actually an inflorescence (grouping of flowers) with a fleshy, upright spadix surrounded by a petal-like spathe. The true flowers—hundreds of them, male and female—are located inside, at the base of the spadix. The plant is in bloom for only two or three days, during which pollination must occur. Because the female flowers mature first and are no longer receptive by the time the pollen-bearing male flowers mature, this species is naturally not self-fertile. In nature, cross-pollination would occur by means of a second plant in bloom nearby. But in cultivation, where a flowering of this species is extremely rare, human intervention is necessary.

Several pollination experiments were conducted

while the plant was in full bloom, in the hopes of producing seed for future propagation. John Trager, whose work as curator of The Huntington's desert collection frequently involves hand-pollination of succulents, volunteered his expertise. Several pollenbearing anthers were removed before maturation and attempts were made to hasten pollen ripening. One of the more unusual techniques involved using a bag of rotting apples, where the ethylene gas produced by the fruit could accelerate the ripening of the pollen. The prematurely extracted pollen samples were then applied to the receptive females over the course of 14 hours.

After the plant's blooming cycle had been completed, the *Amorphophallus titanum* was retired from public display and returned to the greenhouse to await fruit development. During the fall, round orange fruit began to develop—in pollinated and unpollinated areas. Dissection of a few unripe samples revealed only pulp and no developing seed. This appeared to indicate that the pollinated fruits might not bear seeds at all. However, botanists had to wait until the fruit was fully mature before they could be certain.

During the past week, several of the fully ripened (and poisonous) fruits were harvested, and staff members were excited to discover almond-sized seeds inside. The seemingly mundane event has great botanical significance, as these are the first seeds ever known to have been produced by an *Amorphophallus titanum* through self-pollination.

"It's the horticultural equivalent of Dolly the cloned lamb," noted Trager. He added, "it's very rewarding to be able to propagate a plant that is endangered in nature by habitat destruction and human consumption."

It is not known whether The Huntington's famous "Corpse Flower" will ever bloom again. But one thing is certain: its seeds will be propagated and a new generation of plants will be grown, providing botanists with new opportunities for scientific study, and inspiring awestruck observers around the world with renewed appreciation for the wonder and diversity of the plant kingdom.

To learn more about the *Amorphophallus titanum*, visit The Huntington's website at www.huntington.org.□

Reprinted from "News Release" of January 26, 2000 from The Huntington.



OLD MISSION DAM AND NORTHWEST VIEW OF CHAPARRAL-COVERED HILLS MISSION TRAILS REGIONAL PARK—PHOTOGRAPH BY JANE DUGGAN

PLANTS WITH A MISSION®

BY PAT PAWLOWSKI

AS THIS IS BEING WRITTEN, rainfall in San Diego County is way below normal. Even in years with so-called normal rainfall, it's a good idea to conserve water by including drought-tolerant plants, like many of our natives, in our gardens. Therefore, to use words from the old television show "Mission Impossible":

Your mission, native plants, should you choose to accept it, is to make the garden easy on the eyes and easy on the water.

In one minute this message will self-destruct. Dum dum, da da, dum dum, da da . . .

MISSION TRAILS REGIONAL PARK

As many native plant lovers know, spring is not the best time to plant natives; fall is prime planting time. However, it's best to view natives in the spring, since that is when many of them flower. There lies the problem: when you are browsing at fall native plant sales, and you are faced with an unfamiliar specimen,

how will you know what the flowers will look like next spring?

Easy. Your mission, should you choose to accept it, is to pay a vernal visit to some of our local parks and natural areas, when lots of natives will be in bloom.

One of the best native plant hangouts is Mission Trails Regional Park, with its 5,760 acres of chaparral, coastal sage scrub, riparian areas and oak woodland. Points of interest include Cowles Mountain, Old Mission Dam, Kumeyaay Lake, West Fortuna Mountain, Lake Murray, and a state-of-the-art Visitor Center.

Hiking trails wander throughout the park, and along many pathways you'll find just what you're looking for—great examples of native plants to include in your garden.

One caveat: There is no guarantee that the plants will be looking their absolute best. If there has been little or no rain, the plants may decide to pack it in and die back (or in extreme cases, just plain die). However,

vegetation around the Visitor Center may be given some supplemental water, so you'll see at least some of those blooming plants!

Here are a few of the many plant-laden trails: THE OAK GROVE LOOP IS A-OK

This trail, named for recently-planted native oaks, is an easy one-mile hike. In the grasslands you may see blue dicks (*Dichelostemma pulchellum*). The purple flower heads of these small bulbs appear on bare stems that are about 1 to 2 feet long. The visual effect is one of surprise. Leaves occur further down. The bulbs are said to be tasty, and travel deeper into the soil as each season progresses (perhaps to avoid being eaten?).

Blue-eyed grass (Sisyrinchium bellum) also may appear near the trail. Small blue-purple flowers seem to wink at you as they sit atop foot-high clumps of grasslike leaves. The word "bellum" means "handsome," and it certainly is.

THOSE DAM FLOWERS

Along the Fr. Junipero Serra Trail leading to the Old Mission Dam, there are several plants you can use in the garden:

Succulent or arroyo lupine (*Lupinus succulentus*) may wave at you near the dam parking area. This is an annual (the strain of lupine seed offered in catalogs is said to be easily grown) with a lilac-like cluster of purple pea-shaped flowers and distinctive, deeply-lobed leaves.

Fuchsia-flowered gooseberry (*Ribes speciosum*), a tiny-leafed shrub that has startling red flowers brimming with nectar, will be in the hillsides near the dam. If you don't see any, Trail Guide Bill Howell says you should "Follow a hummingbird, and it might take you to the plant."

It will be easy to spot blooming chaparral mallows (Malacothamnus fascicularis) with their showy pink hibiscus-looking flowers. Additional members of the mallow family are also garden-worthy, and if you are in a hurry, they'll oblige because many have exceptionally speedy growth habits.

VISITOR CENTER INTERPRETIVE TRAIL

Along this trail, you're likely to see Cleveland sage (Salvia clevelandii), a shrub with wonderfully fragrant gray-green leaves and whorls of blue-purple flowers. It does not look its personal best in the summer garden since in the wild it has learned to cope with dryness by going into summer dormancy. You may cut it back in summer, or plant S. clevelandii 'Pozo Blue", a cultivar.

And just what is a cultivar? Simply this: A cultivar is a domesticated form of a native plant. Since variations in a plant species form and flower can occur naturally, those with more compact habits and bigger blossoms are

often selected for propagation. In general, most cultivars blend very well with nonnative plants. Given some water and/or pruning, 'Pozo Blue' will look great any time.

Bush monkey flower (Mimulus aurantiacus) should be on everyone's list. The flowers of one cultivar are an eye-entrancing apricot yellow color. It blooms like crazy. Plant predators such as deer and rabbits do not seem to bother it. Cut flowers last a long time.

Bush sunflower (*Encelia californica*) and San Diego County sunflower (*Viguiera laciniata*) will be flaunting their sunny yellow flower heads all over the park. The San Diego County sunflower is unique, since it occurs only in San Diego County and Baja. The center of the flower head is golden yellow, as opposed to the maroon center of the California sunflower.

There are many other good-looking natives to see and covet, but beware:

THE HORROR OF ARUNDO

Also along the Visitor Trail, emerging as Frankenstein from the grasses and plants in the riparian woodlands area, is a tall slender plant that looks like bamboo. Its name is giant cane, or *Arundo donax*, an invasive nonnative that has muscled its way into many riparian native plant communities, thereby shamelessly destroying plant and animal habitat. Park staff are involved in an ongoing removal project to control this villain. If you see it, you may hiss.

LOCATION, LOCATION

Mission Trails Regional Park stretches from Tierrasanta to Santee, and from Route 52 to I-8. The Visitor Center, open 9:00 a.m.-5:00 p.m. daily, is located at One Father Sierra Trail (off Mission Gorge Road, San Carlos). Hikes with a naturalist are offered Wednesdays, Saturdays, and Sundays from 9:30 a.m.-11:00 a.m. Additional walks/talks with outdoor themes are ongoing. Phone: 619/668-3275.

MISSION: POSSIBLE?

To enable your natives to complete their mission of spiffing up your garden without guzzling water, here are some tips:

First, visit a place like Mission Trails Regional Park. Then, get a book or two about native plant care: *Growing California Native Plants* by Marjorie G. Schmidt and *Propagation Secrets for California Native Plants* by Jeanine De Hart are great. Drop in at a meeting of The California Native Plant Society, San Diego Chapter; or the Lake Hodges Native Plant Club.

You'll find out all you need to know.

The mission, it seems, is possible after all. □

Text copyright by Pat Pawlowski, who is a writer/lecturer and the garden designer for Animated Gardens.

PODOCARPUS

BY ROBERT HORWITZ

I THINK THAT THIS tree should be called the tree of refreshment as it gives one that feeling when one looks at the green lacy leaves, proud trunk, and branch display. I have had a podocarpus of the fern pine variety growing in an old cast iron pot for thirty years. During that time it has grown to be ten feet tall and somewhat gnarled as it really has been treated as a large bonsai. Its care is minimal: watering once a week, or more often during hot spells and fertilizing at best once every two months. Leggy branches are trimmed to keep the gnarled shape.

There is another common variety of podocarpus whose leaves are longer and more coarse than the fern pine type. This tree will grow quite high given the proper environment. The branches are nicely spaced and spread out in a horizontal fashion from the main trunk.

Both varieties are used very fashionably as a hedge row, planting many along a property line about two feet apart, and after they reach the hedge height you want, they can be pruned vertically as well as horizontally. This causes the leaf growth to



become more dense around the main trunk and remaining branches, which gives that good hedge effect.

Another positive thing about the podocarpus is that it grows well in ordinary soil, asking only enough fertilizer and water to stay green and to provide growth. It grows slowly, which may require some patience on your part.

Another plus is that its roots are not the invasive type and if planted along cement or brick work will not heave these structures with large roots. However, remember that roots go where the water goes.

If you live in an area where it freezes, do not bother to plant the tree as it likes warm weather, especially the weather along Southern California coast. It is a very pest-free tree. After the plant starts to grow significantly, look out for chlorosis in the leaves which means that there is an iron deficiency that needs correcting.

Robert Horwitz is a retired aerospace engineer who gardens in the Point Loma section of San Diego. Illustration by Evelyn Maino

www.missionhillsnursery.com

Mission Hills Nursery 1525 Fort Stockton Drive San Diego CA 92103 619/295-62808



PAT WELSH'S SOUTHERN CALIFORNIA GARDENING: A Month-by-Month Guide

Pat Welsh

San Francisco, Chronicle Books, 2000, 322 pages, 59 color photos, 8½ " x 11", softcover, \$24.95

This is a revised edition of the original 1992 book so popular with Southern California gardeners, from our own local author.

Right off, you have to know I have a bias with this book. I helped with some of the research and spent numerous hours with the author discussing finer details of how to express horticultural concepts so that they were easy to understand but still accurate, what to leave out (such as pests now under better control), and what to put in to move gardeners to ever better plots.

For those who have Pat's first edition and have used it to improve their gardens over the years, this is not a cosmetic change. Two more years went into the revision to bring it up-to-date with the latest products, nomenclature, and trends in gardening plants. The book is fifteen pages longer, has filled up the white space in the margins and lists, and has been edited in detail with the reader in mind. And at last, there is a new and much improved index that makes all the good information much more accessible.

Pat loves gardening and loves to help people to be successful at gardening so they will enjoy it as much as she does.

Reviewed by Lucy Warren

BOB FLOWERDEW'S ORGANIC BIBLE: Successful Gardening the Natural Way

Bob Flowerdew

North Pomfret, VT., Trafalgar Square Publishing, 1999, 220 pages, 175 color photos, 9" x 11", hardcover, \$35

If the author's occupative name and his smiling face with long bronze hair braid on the front of this book exude the authority to create a garden bible, his self-confidence is not misplaced. Although the British Isles are where he and other Flowerdews have long established reputations as garden experts in the British Isles and, although some details need translating to California conditions, his common sense and easy-going narrative style make up for it.

"Seeds Want To Come Up, Plants Want To Grow" is the

title of one of his chapters and also could be his mantra for gardening in partnership with nature. He does not consider digging to be a part of nature, but healthy soil, combined with watering and mulching, is. Pest control involves wit and cunning; attracting predator insects with moisture is one strategy he encourages, along with proper air flow and garden hygiene. Home grown compost is "green manure," and, in this edible-oriented book, flowers are mainly for compost and pest control.

Flowerdew begins by dispelling a few myths, such as the romantic notion of "cottage gardens," a design form that actually began as a "primitive herb bed outside a garden hut." He dismisses the idea of efficiently growing edibles among flower beds, claiming that lush foliage, so pleasing to the eye, is detrimental to the production of healthy fruits and vegetables.

Handsome color photos, taken in Flowerdew's own garden, embellish the gracefully written and designed text that focuses primarily on the growing of edible plants. It's readability and use of common names wherever possible make it a grand primer for beginning organic gardeners, or for those who have been put off by more earnest and solemn writings on the subject. Lengthy descriptions of specific plant varieties and techniques for harvesting, storing and cooking them help to make this a true compendium of organic gardening.

Reviewed by Marge Howard-Jones

THE CALIFORNIA LANDSCAPE GARDEN: Ecology, Culture and Design

Mark Francis and Andreas Reimann

Berkeley, University of California Press, 1999, 234 pages, 31 color illustrations, 91 b&w photos, 842'' x 11'', softcover, \$29.95

Reading this book was pure pleasure and the lessons offered by the authors were easily digested. The goal of a garden should be to express a sense of place. The authors discuss all aspects of creation of such a garden, including the goals of retaining biologic diversity, water conservation, avoiding chemicals, and maximizing habitat. The gardens rely mostly on use of native and some carefully selected exotic plants and are established using recognizable forms. For ease and success of design, each garden or garden room should have a theme whether it be for attracting birds, butterflies, or re-creating an artistic or poetic vision. Developing rooms for different aspects of the garden and different purposes keeps the garden interesting and functional. Environmentally sensitive building materials should be chosen for the hardscape of the garden, then nature takes over the control and development.

So many design books are best used on the coffee table where their lush color photos create more envy than instruction. This book, instead, relies on the use of many small black and white photos to demonstrate the concepts of lines, forms and textures. Very specific guidelines and practical discussions of the elements of design will assist anyone who wants to create a truly California landscape. The spirit of the book is expressed in the quotation: "We are returning to our native place after a long absence, meeting once again with our kin in the earth community." (Thomas Berry in *Dream of the Earth.*) In this book the authors invite us to move from an "age of excitement

to an age of restoration" and show us how to do it.

Reviewed by Connie Beck

GARDEN RETREATS: Creating an Outdoor Sanctuary Barbara Blossom Ashmun

San Francisco, Chronicle Books, 2000, 149 pages, 101 color photos, 8¾" x 9", softcover, \$22.95

Lush colorful garden spots, with unusual benches and arbors, often overshadowed by tall evergreens in the background; it could be a garden in Southern California, but it's more likely a scene found in the Portland area. It's here the author lives and where many truly gorgeous photographs that illustrate her book were taken. Could such sylvan beauty be created in our semi-desert region? Perhaps, with lots of time, effort and finance, but in the meantime, many elements in this book can be applied to creating tranquil garden settings in any location.

In some ways, once the concept of a garden retreat has been described and its value appraised, words become redundant to the visual expressions of the photographs. There is much discussion of the need for quiet places that encourage rest and reflection and the responses that come from such experiences. And there is a great deal of interpreting the specific restorative aspects of particular garden features, textures, colors, shapes, all are seen in the light of their contribution to serenity.

Most of the book is organized into chapters focusing on different aspects of garden design, from finding your own style to sheltering walls, views of sky and trees, entries, paths, and ornamentation. These chapters have a wealth of ideas that would translate to our area; the chapters on plant color, texture, and usage might not.

The best part of the book is the color photos representing a myriad of creative construction and artful plantings. The details of paving, and the mixture of shapes and colors can best be appreciated by simply looking at pictures of them. But once designs have been absorbed, the author rightfully reminds us that the gardener's own creativity and tranquil spirit is what will be the most expressive element of the garden retreat.

Reviewed by Marge Howard-Jones

SECRET GARDENS Jennifer Potter

London, Coran Octopus, Distributed by Trafalgar Square Press, 1998, 144 pages, 135 color photos, 8½" x 11", hardcover, \$29.95

It is the author's thesis that there are three qualities that secret gardens share. Concealment is readily achieved with enclosure. Privacy is assured when the garden is available for personal instead of public enjoyment. A sense of mystery can be accomplished by the distant sound of water or a trellised entrance into the area. Intimacy is the common feature of secret gardens no matter where or how they are created, Secret gardens may, however, be especially appropriate to Southern California because of our Hispanic heritage. The Islamic gardens with walled courtyards and fountains provided a retreat from the heat and dust of Spain, then Mexico and California, where they are still popular today. The author proposes that gardens can become secret in the way they are used as well as

the way they are designed and created. The pictures of secret gardens in New York, Italy, Paris, Morocco, and all over England are delightful and could motivate almost any gardener to head out to the back forty to create a hidden garden of delights. The photos more than make-up for the text, which is somewhat pretentious and marred by the gratuitous namedropping of gardens the author has visited.

Reviewed by Connie Beck

MY GARDEN (BOOK)

Jamaica Kincaid

New York, Farrar Straus and Giroux, 1999, 229 pages, 40 illustrations, $6\frac{1}{4}$ " x $9\frac{1}{4}$ ", hardcover, \$23

Jamaica Kincaid was born on the West Indian island of Antigua and now lives in a small Vermont village, where she pursues her literary career and gardens with quirky abandon. The author of several novels and collections of essays, she here offers an intimate look at her life as reflected in the gardens she has experienced and the history of gardening itself.

One of her first concerns is the contrast between the gardens of her youth, planted and tended by her family for food, or even earlier, by her ancestors in the employ or even ownership of their Anglo masters, and the European concept of gardens joyfully planted for beauty. She also considers the long range effects of explorers, past and present, who transplant indigenous species to foreign shores. But what might seem at first an overly social perspective on horticulture turns out to be merely a vehicle for savoring the wonder and beauty of botany as she has experienced it. A chapter near the end of the book describes a month-long seed finding tour to China in the company of "real" horticulturists, a journey that was very primitive and frequently uncomfortable, physically and culturally: the point of it all is not a philosophical conclusion but the sharing of how such a foreign, fascinating adventure really felt.

Back in Vermont, Kincaid orders masses of seed packets, which she sends to be propagated at a nearby nursery, and plants arrive in large numbers all at once. As in the rest of the book, organization somehow evolves out of exuberance, but not without many side excursions into visits to other gardens, writings of other gardeners, and the mysteries of plant life. If, at the end, the reader has learned more about the author than anything else, the company has been absorbing, if not a little eccentric, and the examination of many disparate issues sure to nurture new perspectives.

Reviewed by Marge Howard-Jones

Brooklyn Botanic Garden's 21st-Century Gardening Series offerings for 1999 were FLOWERING VINES, WILDFLOWER GARDENS, EASY LAWNS, AND CHILE PEPPERS. Essays by experts, many color photos, and guides for gardeners in every region make up these 6" x 9", 112 page, softcover books. They are issued quarterly and cost \$9.95 at the book store. A Botanic Garden membership is \$35 per year and includes quarterly handbooks and other membership benefits. Their address is 1000 Washington Ave., Brooklyn, NY 11225.

SAN DIEGO FLORAL ASSOCIATION TOURS

A March 8 tour to Norton Simon Museum/Nuccio's Nursery has been added. If you missed this trip in February, you may still be able to go on an identical tour on March 8. Contact Ann Waters at 858/277-5004 by March 7.

MILDRED E. MATHIAS BOTANICAL GARDEN WEDNESDAY 26 APRIL 2000

Since Floral hasn't scheduled a trip to the Mildred E. Mathias Botanical Garden in the Los Angeles area during the past ten years, it was decided now is the time.

Join us for a fabulous day meandering the paths under beautiful trees in this charming garden. The Vireya rhododendrons extolled in an article in this issue are near the "medical center entrance."

We will have a docent-led tour of the garden's prized African, Central and South American tropical and semi-tropical plants. The garden also has living fossils (cycads), a coastal shrub and chaparral area, a small desert planting, an outstanding tree collection, and much more.

Lunch (included) and a stop at a marvelous nursery will complete our day.

MILDRED E. MATHIAS BOTANICAL GARDEN WEDNESDAY 26 APRIL 2000

□ \$33.00 Members (who pay dues to SDFA)

☐ \$36.00 Nonmembers

Lunch included
Make checks payable to San Diego Floral Association
Mail to San Diego Floral Association
1650 El Prado #105
San Diego, California 92101-1622

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PICK-UPS

□Red Lobster Park/Ride, Grossmont Ctr, La Mesa 6:30AM
□Mission Valley on Camino del Este south of B/A 7:00AM
□Oceanside/Park Ride #44, Moreno St. & Vista Way 7:30AM

ADAMSON HOUSE TUESDAY 28 MARCH 2000

We will have a docent-led tour of this 1929 Moorish Spanish Colonial Revival-style home. Here we will see the profuse use of Malibu Potteries' ceramic tile, hand-carved teakwood doors, hand-wrought filigree ironwork, lead-framed bottle glass windows, hand-painted murals, pools, fountains, and much more.

In addition, there is the gorgeous ocean view and beautiful gardens filled with trees, shrubs, perennials, and annuals (over one thousand plant species).

Lunch on your own in Santa Monica.

Any questions? Call Ann Waters, 858/277-5004.

ADAMSON HOUSE TUESDAY 28 MARCH 2000

□ \$29.00 Members (who pay dues to SDFA)

□ \$32.00 Nonmembers

Lunch is on your own in Santa Monica

Make checks payable to San Diego Floral Association
Mail to San Diego Floral Association
1650 El Prado #105
San Diego, California 92101-1622

Please include a stamped/addressed envelope

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SAN DIEGO FLORAL ASSOCIATION

Garden Center and Library - Founded in 1907 MAIL — 1650 El Prado #105, San Diego CA 92101-1622 619/232-5762, located in Casa del Prado, Room 105, Balboa Park

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April 18 June 20 October 17 5:45 p.m. Casa del Prado, Room 101 Balboa Park, San Diego

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Alpine CA 91903-0532		Alpine CA 91901-2516	
CITY BEAUTIFUL OF SAN DIEG	0	1st Fri - 10:00 am, Home of Me	mbers
In Memory of Ruth Smith	Ŭ	BERNARDO GARDENERS	
Pres: Mary Vaughn	234-9856	Pres: Marielle De Forge	858-487-0814
P. O. Box 80878	251,7000	13357 Corte De Chucena	
San Diego CA 92138-0878		San Diego CA 92128-1573	
FRIENDS OF THE ROSARIUM		3rd Thu - 1:30 pm, Rancho Bern	ardo Library
DESCANSO GARDENS		BONITA VALLEY GARDEN CLUB	
Pres: Robin Corwin	213-650-2209	Pres: Kathy Taylor de Murillo	585-8770
11400 Dona Dolores Place	213 030 2207	40 Palomar Drive	000 0110
Studio City CA 91604-4239		Chula Vista CA 91911-1414	
2nd Thu - in classroom or in Ro	carinm	2nd Wed - 9:30 am, Rohr Park M	Aanor
Times vary. Call for information		Sweetwater Road	vianoi,
JAPANESE FRIENDSHIP GARDE		BRIDGE AND BAY GARDEN CLU	IR
BALBOA PARK	IN .	Pres: Marilyn Foster	435-2335
Contact: V'Ann Cornelius	232-2721	770 F Avenue	455-2555
2125 Park Boulevard	232-2721	Coronado CA 92118-2130	
San Diego CA 92101-4792 PALOMAR DISTRICT		4th Mon - 9:30 am, Winn Room Coronado Public Library	,
	NC		
CALIFORNIA GARDEN CLUBS, I		CHULA VISTA GARDEN CLUB	420 6046
Dir: Patricia Garrick	287-0282	Pres: Mary Payette	420-6046
6252 Lance Place		1148 Third Avenue #109	
San Diego CA 92120-3713		Chula Vista CA 91911-3153	6 . 6 .
QUAIL BOTANICAL GARDENS FOUNDATION, INC		3rd Thu - 1:00 pm, Norman Parl	
	760-436-3036	CORONADO FLORAL ASSOCIATI	
Pres: Joyce Wilder P. O. Box 230005	700-430-3030	Pres: Linda Stanton	437-6132
Encinitas CA 92023-0005		P. O. Box 180188	
SAN DIEGO BOTANICAL GARDE	DAT.	Coronado CA 92118-0188	
FOUNDATION	214	CROWN GARDEN CLUB	
	224 0001	Pres: Linda Stanton	437-6132
Pres: Robert Hodges	234-8901	855 C Avenue, Apt 2	
2125 Park Boulevard		Coronado CA 92118-2642	
San Diego CA 92101-4792		4th Thu - 9:30 am, Coronado Lil	brary
SAN DIEGO HORTICULTURAL S		DOS VALLES GARDEN CLUB	
Pres: Don Walker	760-630-7307	Pres: George Speer	760-749-9608
1781 Sunrise Drive		P. O. Box 123	
Vista CA 92084-6424		Valley Center CA 92082-0123	
2nd Mon - 6:30 pm, except Jun		2nd Tue - 12:30 pm, Valley Cen	ter Com. Hall
Satellite Wagering Facility		ESCONDIDO GARDEN CLUB	
Del Mar Fairground, Jimmy Du		Pres: Yolanda Fleet	760-745-1219
SOUTHWESTERN JUDGES COUN		3045 Felicita Road	
Chr: Elma Garcia	858-672-9838	Escondido CA 92029-6725	
11255 Del Diablo		3rd Fri - 12:30 pm, Escondido Jo	oslvn Center
San Diego CA 92129-1518		FALLBROOK GARDEN CLUB	,
1st Wed - 10:00 am, Casa del P	rado	Co-Pres: Bernie Dennett	760-723-8519
Jan, May, Sept, Nov		Co-Pres: Betty Henry	858-731-0706
PROFESSIONAL AFFILIAT	ES:	FLEURS DE LEAGUE GARDEN C	
CLASSIC GARDENS		Chrm: Mrs. Randall Geddes	760-728-6291
P. O. Box 2711	858-459-0316	2748 Sugar Pine Lane	, 50 720-0291
La Jolla CA 92038-2711		Fallbrook CA 92028-9419	
DEL MAR FAIR FLOWER & GAR	DEN SHOW	2nd Mon - 10:30 am, Home of M	Members
The West Coast's Post	050 702 4272	2116 171011 - 10.30 am, 110me of N	Tellibers

Spring Valley CA 91977-1212

Pres: Norma DeMart

3891 Rogers Road

858-792-4273 GROSSMONT GARDEN CLUB

296-9687

466-9398

CLUB AND PROFESSIONAL AFFILIATES (CONTINUED)

	2nd Mon - 9:30 am, 4975 Memorial Drive,	La Jolla CA 92037-2019	SAN MIGUEL BRANCH
	La Mesa	4th Thu - 10:00 am, Torrey Pines Christian	AMERICAN BEGONIA SOCIETY
LA	JOLLA GARDEN CLUB	Church, LJ	Pres: Thelma O'Reilly 670-0830
	Pres: Presidential Board	THE VISTA GARDEN CLUB	10942 Sunray Place
	P. O. Box 2713	Pres: Marilyn McGawn 760-941-7889 P. O. Box 44	La Mesa CA 91941-7241
	La Jolla CA 92038-2713		Last Sat - 10:30 am, Home of Members BONSAI
г А	3rd Tue - 1:30 pm, L.J.Lutheran Church KESIDE GARDEN CLUB	Vista CA 92085-0044 1st Fri - 12:00 pm, Vista Senior Center	HON NON BO ASSOCIATION
LA	Pres: Mildred Digenan 443-1529	1st 1-11 - 12.00 pm, vista Semoi Center	Pres: Lit Phan
	P. O. Box 122	IVERANA COLLOCIO	4551 El Cajon Boulevard
	Lakeside CA 92040-0122	IKEBANA SCHOOLS:	San Diego CA 92115-4316
	3rd Mon - 2:00 pm, Lakeside Historical	ICHIYO SCHOOL OF IKEBANA	1st Sun every other month (begin Feb)
	Church, 9906 Maine Avenue	SAN DIEGO CHAPTER Pres: Haruko Crawford 660-2046	10:30 am, Casa del Prado
LA	S JARDINERAS	10411 San Carlos Drive	SAN DIEGO BONSAI CLUB, INC.
	Pres: Mrs. Kurt E. Bake	Spring Valley CA 91978-1034	Information Telephone 699-8776
	3516 Liggett Drive	IKEBANA INTERNATIONAL CHAPTER 119	P. O. Box 40037
	San Diego CA 92106-2153	Pres: James H. Ard 858-274-6337	San Diego CA 92164-0037
	3rd Mon - 10:30 am, Home of Members	3031 Karnes Way	2nd Sun - 10:30 am, Casa del Prado
	n's garden clubs of america, inc.	San Diego CA 92117-4311	Beginning & intermediate classes at 9:00 am before meeting
SA	N DIEGO CHAPTER	4th Wed - 10:00 am, Casa del Prado	BROMELIAD
	Pres: Dan Wilson 858-727-0466	IKENOBO CHAPTER OF SAN DIEGO	BROMELIAD STUDY GROUP OF
	306 Morgan Place	Pres: Mrs. Charles Oehler 858-278-5689	BALBOA PARK
	Vista CA 92083-8018	2822 Walker Drive	Pres: Robert Vitacco 469-353
. cr	4th Sat - 11:00 am, Gardens of Members RACOSTA HORTICULTURE CLUB	San Diego CA 92123-3056	9137 Dillon Drive
VII.	Pres: Nell McChesney 760-599-4815	OHARA SCHOOL OF IKEBANA	La Mesa CA 91941-4230
	825 Cape Breton	LA JOLLA CHAPTER	2nd Tue - 7:30 pm, Casa del Prado
	Vista CA 92084-6500	P. O. Box 500765 858-672-7850	SAN DIEGO BROMELIAD SOCIETY
	3rd Sat - 1:00 pm, MiraCosta Community	San Diego CA 92150-0765	Pres: Patti Parker 461-295
	College, Student Center Bldg (upstairs)	2nd Tues - 10:00 am	P. O. Box 83996
ΜI	SSION HILLS GARDEN CLUB	OHARA SCHOOL OF IKEBANA SAN DIEGO CHAPTER	San Diego CA 92138-3996
	Pres: Donna Knierim	Pres: Mrs. Walter Bourland 276-4667	4th Wed - 7:00 pm, Casa del Prado Nov & Dec ONLY, 3rd Wed
	4th Wed - 7:00 pm	2936 Havasupai Avenue	NORTH COUNTY BROMELIAD SOCIETY
	Call for meeting information 295-2702	San Diego CA 92117-1641	Pres: Margaret Case 760-721-842
PO	INT LOMA GARDEN CLUB	SOGETSU SCHOOL OF IKEBANA	610 Rockledge Street
	Pres: Kay Harry 222-5207	SAN DIEGO BRANCH	Oceanside CA 92054-4230
	876 Golden Park Avenue	Director: Barbara E. Church 298-1535	4th Sun - 1:00 pm, Ecke Building,
	San Diego CA 92106-2955	5845 Friars Road, #1113	Quail Gardens
	2nd Wed - 10:00 am, St. Peters by the Sea	San Diego CA 92110-6004	CACTUS & SUCCULENT
	Lutheran Church, 1371 Sunset Cliffs Drive	SOGETSU SCHOOL OF IKEBANA	PALOMAR CACTUS AND SUCCULENT
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	Pres: "D. A." de Gomes 858-672-0158	2829 Flax Drive	P. O. Box 840
	P. O. Box 27	San Diego CA 92154-2160	Escondido CA 92033
D A	Poway CA 92074-0027 NCHO SANTA FE GARDEN CLUB		4th Sat - 12:45 pm, Joslyn Sr Ctr, Escondido SAN DIEGO CACTUS AND
KA	Pres: Shirley Arms 858-756-5125	PLANT SOCIETIES:	SUCCULENT SOCIETY
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	Rancho Santa Fe CA 92067-2484	CARLSBAD AFRICAN VIOLET SOCIETY	P. O. Box 33181
SA	N CARLOS GARDEN CLUB	Pres: Faye Shirley 858-754-0630	San Diego CA 92163-3181
	Pres: Joyce Zwemke 287-3424	3747 Vista Campana #24	2nd Sat - 1:00 pm, Casa del Prado
	7735 Larchwood Way	Oceanside CA 92057-8248 4th Mon - 11:00 am - United Methodist Church	CAMELLIA
	San Diego CA 92120-1514	of Vista, 157 Lado de Loma	SAN DIEGO CAMELLIA SOCIETY
	4th Tue - 9:30 am, Home of Members	BEGONIA	Pres: Jay Vermilya 449-094
SA	N DIEGUITO GARDEN CLUB	ALFRED D. ROBINSON BRANCH	2129 Hillslake Drive
	Pres: Evalyn Rodgers 858-635-1557	AMERICAN BEGONIA SOCIETY	El Cajon CA 92020-1019
	1518 Calle Orquideas	Pres: Doris Smith 222-1294	3rd Wed - 7:00 pm, Casa del Prado Meetings Nov through Apr ONLY
	Encinitas CA 92024-4114	4505 Long Branch Avenue	DAHLIA
	4th Wed - 9:30 am, Quail Bot. Gardens	San Diego CA 92107-2333	SAN DIEGO COUNTY DAHLIA SOCIETY
SC	RIPPS MESA GARDEN CLUB	2nd Tue - 10:30 am, Home of Members	Pres: David J. Tooley 858-672-259
	Pres: Judith Chapman 858-566-2947	PALOMAR BRANCH	11375 Nawa Way
	11530 Tribuna Avenue	AMERICAN BEGONIA SOCIETY	San Diego CA 92129-1116
	San Diego CA 92131-1910 4th Mon - 6:00 pm, Scripps Ranch Library	Pres: Michael Ludwig 262-7535	4th Tue - 7:30 pm, Casa del Prado
тн	E VILLAGE GARDEN CLUB OF LA JOLLA	6040 Upland Street	
117	Pres: Pat Miller 858-459-2039	San Diego CA 92114-1933 2nd Sun - 1:30 pm, except May & Aug	
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CLUB AND PROFESSIONAL AFFILIATES (CONTINUED)

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3rd Mon - 7:30 pm, Casa del Prado Jan/Feb - 4th Mon TREES PEOPLE FOR TREES Library P. O. Box 505 San Diego CA 92112-0505 4th Tue - 6:30 pm, 743 Imperial Avenue WATER GARDEN SOCIETY Pres: Carol Forman 3761 Hatton Street San Diego CA 92111-4102 Call for meeting information. AFFILIATES:

SOUTHERN CALIFORNIA WATER GARDEN 858-278-2774

234-TREE

FAX 687-0151

Send changes to: Lynn Beyerle, Affiliates Editor California Garden, 1650 El Prado #105, San Diego CA 92101-1622. Call 619-232-5762. Deadline for May-Jun issue: Mar. 15, 2000.

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4808 Santa Monica Ave. San Diego, CA 92107 ORNAMENTAL PLANTS FOR SUBTROPICAL REGIONS by Roland Hoyt has been reprinted by his sons. The book has been available only at rare book stores until now. (Going Rate \$65.00) Bill and Mike have donated the books to San Diego Floral Association. The books will sell for \$14.50 (tax included). \$10 of each book sale will be added to the scholarship fund established in the name of Ethel and Roland Hoyt. The books are available at the San Diego Floral office in Casa del Prado, Balboa Park. They can be mailed.

If you are a newcomer to San Diego you probably do not know about Roland Hoyt. He was one of our earliest landscape architects and is responsible for the landscaping of Mission Bay, the Community Concourse, and many noteworthy gardens around the city. At the time this book was written, there was no guide for Southern California that listed plants by their needs and requirements. It is still the most reliable guide available. The later half of the book is a writen description and sketch of each plant in alphabetical order. In recent years many scientific names have been changed but there is an updated nomeclature list at the end of the book. The original 1940 book was published as a pocketbook, but this is enlarged—it is a handsome hardback book 7" x 101/2". The price of the book (tax included) is \$14.50. Handling and postage is an additional \$3.00.

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KATE SESSIONS BOOK

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